**To:** Vendlinski, Tim[vendlinski.tim@epa.gov]; Skophammer,

Stephanie[SKOPHAMMER.STEPHANIE@EPA.GOV]

Cc: Kemmerer, John[KEMMERER.JOHN@EPA.GOV]; Diamond, Jane[Diamond.Jane@epa.gov]

From: Foresman, Erin

**Sent:** Tue 11/25/2014 5:24:11 PM

Subject: RE: Mini X2 analysis example from BDCP numbers

Hi Tim.

Great idea. I am working on the maps now but with everything happening in the next six weeks I'm wondering if we might push it to January? Is that too far away? I'm building some exciting maps/figures that will hopefully substantially broaden the X2 conversation and make it an easier concept to own. I completely agree on X2 fluency  $\odot$  ... I'm still working on that!

## Erin Foresman

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Schedule: M 7:30a - 4:00p; T - F 7:30a - 2:00p

From: Vendlinski, Tim

**Sent:** Friday, November 21, 2014 3:33 PM **To:** Foresman, Erin; Skophammer, Stephanie

Cc: Kemmerer, John; Diamond, Jane

Subject: Fw: Mini X2 analysis example from BDCP numbers

Thanks, Erin.

This reminds me that we should schedule a briefing (when you're ready) for Jane & John on X2, the low salinity zone, and the mapping you're doing about fish abundance and the salinity gradient. As Tom noted today, this has been a central feature of EPA's regulatory approach, so we should all be fluent in the promise of the methodology and the remaining uncertainties.

Tim

Sent from my BlackBerry 10 smartphone on the Verizon Wireless 4G LTE network.

From: Foresman, Erin < Foresman. Erin@epa.gov>

**Sent:** Friday, November 21, 2014 11:48 AM

To: Hagler, Tom; Skophammer, Stephanie; Vendlinski, Tim

Subject: Mini X2 analysis example from BDCP numbers

## Hi Gang,

I don't have time just now to make this super pretty, but here is the excel file where I did some quick comparison of X2 values.

Open the file and just look at the charts. Review the charts furthest to the right first. They show the monthly X2 values per water year type for the EC and NAA (BDCP baseline conditions). The charts just to the left of these charts are the same, but also include Alts 1, 4H4, and 8. Basically, the EC conditions show the lowest X2 values suggesting that the NAA and other alternatives are characterized by seawater intrusion that is worse than it is today. In the dry and critical years, Alt 8 does better than EC.

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